REMARKS

The Office Action and the cited and applied references have been carefully reviewed. No claim is allowed. Claims 47-54 presently appear in this application and define patentable subject matter warranting their allowance. Reconsideration and allowance are hereby respectfully requested.

The title of the invention is amended as suggested by the examiner.

New claims 51-54 are supported by the specification in the paragraph bridging pages 25 and 26.

Claims 47-50 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. This rejection is believed to be obviated by the amendment to claims 47-50 in which the presence of constant regions which are not equal to the amino acid sequences of the constant regions of non-human interleukin-18 antibody is positively recited in the claims. The artificially produced polypeptide used in the methods of the present invention has a part or the whole of the amino acid sequences of variable regions of naturally-occurring human or non-human anti-interleukin-18 antibody as well as constant regions which are not equal to or the same as the amino acid sequences of the constant regions of non-human anti-interleukin-18 antibody.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 47-50 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Taniguchi et al. in view of Kohno et al. and Reichmann et al. This rejection is respectfully traversed.

Taniguchi does not teach an artificially produced peptide in which the constant regions are not equal to the constant regions of non-human anti-interleukin-18 antibodies. Furthermore, while Taniguchi suggests using an interleukin-18 antibody in an ELISA based on the fact that a relatively large amount of interleukin-18 is detected in the serum of a patient suffering from rheumatoid arthritis. However, Taniguchi does not teach or suggest the use of interleukin-18 antibody for the treatment of a patient suffering from rheumatoid arthritis.

Kohno also teaches nothing about the artificially produced peptide of the present invention which has constant regions not equal to those found in constant regions of non-human interleukin-18 antibody, including its use for treatment of diseases as recited in the amended claims.

The examiner holds that Riechmann teaches a method to make a humanized antibody. However, since neither Taniguchi no Kohno teaches the use of interleukin-18 antibody for the treatment of diseases as recited in the amended claims, it is

clear that a person of ordinary skill in the art would not have been motivated to modify the interleukin-18 antibody to obtain an artificially produced peptide for neutralizing a biological activity of interleukin-18, thereby treating diseases as recited in the amended claims.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 47-50 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Taniguchi et al in view of Kohno et al. and Huston et al. The examiner holds that Huston teaches a method of constructing an anti-digoxin single chain antibody fragment (scFv). The examiner states that the main advantages of scFv are the rapid clearance from circulation in humans and reduced toxic side effects. This rejection is respectfully traversed.

While the examiner states that scFv would meet the limitation of the present claims, applicants submit that scFv is distinct from an artificially produced peptide as defined in the amended claims. Besides, Sandhu states at page 452, right column, in the beginning of the third paragraph, as follows:

> The reports that suggest that some scFv analogs or fustion proteins exhibit lower binding affinities than the parent antibody may indicate that further optimization of scFv design is necessary.

This statement indicates that it would be difficult to expect the function of antibody from the function of scFv. Furthermore, applicants point out that digoxin is not the same as interleukin-18 and Huston discloses nothing about an interleukin-18 antibody. Accordingly, Huston does not satisfy the deficiencies of the Taniguchi and Kohno references as discussed in the preceding rejection above and therefore the combination of Taniguchi, Kohno, and Huston cannot make obvious the present invention.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

In view of the above, the claims comply with 35 U.S.C. §112 and define patentable subject matter warranting their allowance. Favorable consideration and early allowance are earnestly urged.

Respectfully submitted,

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